# The RARS EXCITER

No 296, November 1994 - Repeaters: 146.64-, 444.525+, 444.95+ BBS: 772-9176

## GIVING THANKS

We're heading into the heart of the big holiday season... Thanksgiving, Christmas (or Hanukkah) and New Years. With all of these holidays and the festivities surrounding them, it can be hard to keep the original intent of the holiday in mind.

With Thanksgiving, most of us know the story of the Pilgrims and how they gave thanks for their first harvest and surviving their first year in the "New World."

As a kid in Sunday school I was always impressed with the story of the ten lepers who were healed (Luke 17:12-18). Ten people suffering leprosy... a terrible disease made all the more terrible because there was no medical treatment

*continued on page 10*

## RARS AUCTION NOVEMBER 1st

Grab your checkbook, swing by the ATM and load your junk... er, ah priceless treasures into the ole jalopy on November 1 and make the scene at the annual RARS auction. You must register to buy or sell at the auction, and registration will be conducted from 6:00PM until 7:30PM. Since the auction is held as a part of the regular RARS meeting, after a (very) little business is conducted, the auction will commence. As usual, Jack Ritter W0UCE will conduct the auction. Two tickets to the upcoming JARSfest will be given away at the meeting.

Selling your equipment at the meeting helps raise money for RARS, since there is a 10% commission (with a maximum of $10) on each sale. Trying to avoid the commission by making side deals outside in the parking lot after the meeting will result in the perpetrator being bound, gagged and hoisted to the top of the .64 repeater tower covered with a gelatinous concoction of pigeon food.

Remember, the BIG EVENT is Tuesday, November 1 at the Forest Hills Baptist Church (directions on page 2). Don't miss it or your chance to get the deal of the century will be going, going and GONE until next year.

*Curt KD4YU*

**RARS NOMINATING COMMITTEE REPORT**
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**The Raleigh Amateur Radio Society, Inc. (RARS)**, founded in 1969, has grown to be one of the premier radio clubs in North Carolina. Current membership is over 400.

The objectives of the club are to promote world wide friendship through Amateur Radio; to be of public service by providing radio communication in times of disaster, emergency, or civic need; to educate members in radio technique, and to assist in obtaining Amateur Radio licenses.

All persons interested in Amateur Radio, currently licensed or not, are eligible to apply for membership to the club.

Dues to the club are $18.00 per year (which runs from July 1 to June 30). Applications for membership may be obtained from any of the officers named below; from the newsletter editor, named on the facing column; or at any RARS Meeting.

Club meetings are held the first Tuesday of every month, 7:30 PM, at Forest Hills Baptist Church, on the corner of Clark Avenue and Dixie Trail, just off of Hillsborough Street.

In addition to the many social and special events, the club sponsors a 2 m repeater, W4DW, on 146.04/64 MHz. The club also sponsors repeaters on 223.04 / 224.64 MHz, 449.5 / 444.5 MHz, 449.95 / 445.95 MHz and a packet cluster node on 147.57 MHz. All repeaters cover Raleigh, and most of the surrounding Wake County area. The auto-patch on W4DW is now no longer closed and is open to all duly licensed amateurs.

### 1994 Officers:

| | |
|---|---|
| President: | Rick Merkle, KA3PSK<br>6412 Sassafras Lane<br>Raleigh, NC 27614<br>870-8268 |
| Vice President | Bill Lyon, KD4LLQ<br>2351 Champion Court<br>Raleigh, NC 27606<br>832-7975 |
| Secretary: | Jeff Wittich, AC4ZO<br>211 Dundalk Way<br>Cary, NC 27511<br>362-9456 |
| Treasurer: | Mike Murphy, WA4BPJ<br>7329 Barberry Court<br>Raleigh, NC 27615<br>847-4641 |

**The EXCITER** is published monthly by the Raleigh Amateur Radio Society, and is mailed at no cost to its members.

Letters to the Editor, technical articles, items of interest to the ham community and guest editorials are actively solicited.

Any article published in the EXCITER does not necessarily represent the views of, the Officers, Board of Directors, Editor, or Society Membership, nor does publication thereof represent concurrence by the Officers, Board of Directors, Editor, or Society membership with the contents of the article.

Articles will be printed at the discretion of the Editor, and no article will be published unless it is accompanied by the name(s) of the person(s) submitting the article.

All copy must be in the hands of the editor by the end of the Board of Director's meeting on the third Tuesday of each month. Articles submitted for publication may be hand or type written, an ASCII file on disk transmitted electronically via telephone modem, or on the ham bands using PACKET.

Ham related items for sale by the members will be advertised without charge for one issue, but may be re-submitted as often as desired. These ads must be non-commercial in nature.

Commercial ads will be run in return for the following donations to the club:

| | Single Issue | Full Year |
|---|---|---|
| Business Card | $7.50 | $75.00 |
| Quarter Page | $11.25 | $112.50 |
| Third Page | $15.00 | $150.00 |
| Half Page | $22.50 | $225.00 |
| Full Page | $50.00 | N/A |

(Commercial ads must be of "camera-ready quality," and obviously can not be sent via ham bands.) Due to the reprographic process used, no color copy can be accepted.

**Mailing List:** Mike Murphy, WA4BPJ
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SPECIAL SERVICE CLUB

Young Ladies' Radio League

AMSAT

SOUTHEASTERN REPEATER ASSOCIATION SOCA MEMBER

# AND I THOUGHT IT WOULD BE A VACATION AT THE BEACH...

Many of you know that I have to travel as a part of my job. Fortunately, as I am in communications, I get to participate in some very interesting projects in some very out of the way places. Quite a few of the places I visit are in the Middle East. One customer is located in the Kingdom of Saudi Arabia which has two possible Amateur callsign prefixes - HZ and 8Z. I found that commercial licenses are similar to Ham calls, for example 8ZB231. Commercial callsigns in the U.S. are a lot longer, for example WNNN-1234.

Anyway, our customer is an oil production company which is located near Al-Khafji. This town is located in what used to be called the Neutral Zone, which up until the Gulf War was shared by Kuwait and Saudi Arabia; Saudi now has exclusive ownership of the area. Al-Khafji is a small town of about 10,000 people and is approximately 10 kilometers south of the Kuwait-Saudi border. It lies directly on the Arabian/ Persian Gulf (it depends on who you are talking to), and the average temperature during the day in the summer time is about 42 degrees C (107 degrees F).

Our system involves a number of radios which will provide ship-to-shore radio communications as well as shore-based dispatch. The offshore site lies about 30 kilometers in the sea on an oil platform, with a radio tower extending approximately 150 feet into the air. From this location they must have communications with various boats and ships (read supertankers) from as far away as 100 kilometers from land. As a part of the contract, we were to conduct a propagation test to see what changes would need to be made (if any) to the system design to accomplish this task. The customer identified several problems such as co-channel interference, and I was to check it out personally. While onshore, I had the wonderful opportunity to meet Yoshiaki Tashiro, JA0BXU who works there as a communications engineer. He helped us argue (on the air) with one of the co-channel interference sources, a Kuwaiti taxi dispatcher on 338.600 MHz. We all know how the Chapel Hill taxi company has been a pain to deal with over interference problems; imagine arguing with someone in another country 150 kilometers away in another language over who has the right to use the frequency! It seems that the oil company has a Saudi radio license and the taxi company has a Kuwaiti radio license. What made it very difficult is that the Kuwaiti station was running at least 100 Watts and was always making calls. They really didn't like it when I tested our 40 Watt transmitter on their 400+ foot tower with a 1000 Hz tone. Every time we transmitted we were greeted with a stream of Arabic curses.

To conduct the test, we were given the exclusive use of a 60-foot long transport ship and a full crew of 7 men as well as a radio technician. It was good to know that my customer's technician was Filipino - as was the rest of the crew of the ship. He made a great translator as I don't speak any Tagalog. Unfortunately we had to go through a great deal of red tape to go offshore as we were taking communications gear on-board AND we were leaving Saudi territory/entering international waters AND their oil fields are considered off limits to anyone not approved by the Saudi Coast Guard and/or the oil company. After almost two days of red tape and a complete search of all of our equipment (and seizure of my camera), they let us board the ship.

The first day we accomplished a great deal, finding that we had more than enough radio coverage between the shore tower (which is over 400 feet tall) and the offshore station. That night we slept at the offshore platform, and had a wonderful dinner at the company's mess hall. The next morning we found the ship's crew fishing with just large hooks tied to thin rope. Apparently the fishing off the platform was great, and while I watched they caught a small swordfish.

We left the platform and headed due east, right for the center of the Gulf. I had charted several locations for signal readings where it was likely oil tankers would travel. I was giving the ship's captain each bearing (latitude and longitude) and he would correspond all of this to his charts, which turned out to be different from mine! At our furthest point east, the captain started to turn the ship around in circles,

and my translator came running down from the pilot house. Even though he was supposed to know every square kilometer of the area, THIS area ran off his map! I found out in very broken English that we were lost and probably in Iranian waters - could I assist the captain right away? Being the only American on-board a Kuwaiti-flagged boat with Filipino-only crew, loaded to the gills with spectrum analyzers, UHF two-way equipment, antennas, scanning receivers, etc., it wouldn't look too good if a "friendly" Iranian patrol boat came out to check on things. Oh, by the way - the Middle East is not the U.S. - it is possible to be guilty before being found innocent, so it is prudent to not be in the wrong place at the wrong time, and here I was!

Fortunately I had just been given an Icom GPS receiver by our Japanese friends and I had my British Admiralty sea charts. The captain only had a compass. If we were to just head west, we could be carried south by the sea currents and wind up in Qatar or some other country - illegally. I quickly spun up the receiver, automatically located a total of 5 GPS satellites, and had an almost immediate fix on our location. I punched in a known coordinate to plot a differential location. Once you have at least two locations entered, the Icom receiver can report several things. It can tell you what direction you are going based on compass readings, and it can tell you how fast you are going. Based on this information, it then tells you how long it will take you to go from point A to point B. It didn't take very long at all to get back into Saudi waters!

Once the emergency was over, we headed north off the Kuwaiti coast to the next set of test locations. These locations were just south of an area which is off-limits to shipping due to Iraqi mines which still exist. As we got to the most northern point, we heard a booming voice on International Marine Channel 16 - "Attention ship at xxx location, this is United States Warship. You are 10 miles off of our bow. Please announce your intentions!" It seemed strange that just hours ago we were worried about an Iranian investigation, and now I was going to be attacked by my own country's Navy! We radioed back that we were heading back south to Saudi immediately. The destroyer which called us was concerned that we were a smuggler headed for the Iraqi coast, and their job was to enforce the United Nations' trade sanctions. Coincidentally we had just finished our work...

We met our customers back on-shore and had quite a time explaining all of the troubles we had gone through to ensure the signal quality of their radio system. I can't wait until next April when we commission the system and I have to do this all over again!

*Todd KS2Z*

P.S. Yeah, it's all real. Want to come next time?

# RARS NOMINATING COMMITTEE REPORT

In accordance with the RARS By-Laws, the nominating committee announces the following RARS members who have agreed to serve the society if elected:

**RARS Officers- Two Year Term:**

| | |
|---|---|
| Vice President- | Bruce Buck KC4UQN |
| Treasurer- | Mike Murphy WA4BPJ |

**One Year Term:**

| | |
|---|---|
| Public Service Director- | Doug Sweet AD4UL |
| Education Director- | Lynn Pitegoff KO4QH |
| Publicity Director- | Gary Pearce KN4AQ |
| SIG Coordinator- | Ed Alderman WA4PEN |
| Exciter Editor- | Curt Phillips KD4YU |
| FM Repeater Chairperson- | Chuk Gleason KB4MDZ |
| ARRL Liaison- | Chuck Littlewood K4HF |

**For Chairpersons, One Year Term:**

| | |
|---|---|
| RARS VE Coordinator- | V. Yakamavich AA4MY |
| W4DW Trustee- | Lynn Pendleton K4NYV |

Additional nominations and voting will take place at the regular RARS meeting in November. The installation will take place at the December meeting.

*Chuck K4HF*

**BE SAFE AS YOU TRAVEL OVER THE HOLIDAYS!**

# SWR and YOU,

## or

## You Can Tune a 'Tenna, But You Can't Tune a Dish

Hams who work HF (1.6 to 30 Mhz) are always talking about how they are going to prune their dipole to tune their dipole. It seems that the more wire you cut off these darn dipoles, the more signal you get. After they have cut some copper from the antenna, you start hearing these incredibly precise measurements get called out. Things like "I got my SWR down from 2.8 to 1.55 ." It seems that the lower this "SWR" thing is, the happier the Ham-Head-antenna-hacker is. Satellite dishes, being made out of sheets of steel and not wire, can not be trimmed on frequency.

So what the heck is SWR? Some say it stands for "Some Watts Radiated." Others say it means "Sure Wants to Radiate." So What's Real? SWR stands for "Standing Wave Ratio." It is number. The closer it is to one, the "better" the antenna works. It is never less than one. It can be a very high number (like infinity, one of the highest numbers I know). The "Some Watts Radiated" crowd will tell you that if you have a five to one SWR, for every five watts you send down the coax, one is radiated. This is not true, but it is an easy way to remember that the closer your SWR is to one, the better off you are.

So how do you measure your SWR? You get an SWR meter. Really. The most common form is a two in one meter. One meter measures watts going to the antenna. The other measures watts coming back (or "reflected power" as geeks say). Beneath the two needles on the two meters is a scale. You read the scale where the two needles intersect and that tells you the SWR. But wait a second! What's this watts coming back bit? I thought the transmitter sends energy to the antenna, not the other way around.

Yes, watts can really come back from your antenna. Fortunately, you don't get more power back than you send so there will be no real harm done. Then again, if more came back you could sure tell the power company where to get off. At any rate, the concept that is not clear here is a simple one, which applies to many different areas. When you have a source of energy, and a radiator or consumer of energy, you must have a good "match" to get the most efficient transfer of energy. Lets look at some common sense examples of this before everyone gets lost.

A 120 volt outlet and a 100W light bulb (which runs on 120V) are a good match, and the light bulb consumes 100W of power. Some of it is lost as heat and some of it is lost as light output. If you put that 120V light bulb on a 12V battery, it doesn't work as well. This is because the light and the power source are mismatched. If you put a 12V bulb on the battery, it works well. If you put a 12V bulb on a 120V outlet (Warning: Don't try this at home!) you get what we geeks call a catastrophic impedance mismatch and what the fire department calls a house fire. A house fire is a very good example of a non efficient energy transfer.

There are various mechanical examples too. In general, motors are sized correctly given the load they will be encountering. You don't run a truck on a lawnmower engine, and a jet engine running your hedge trimmer is a bit of overkill. A jet engine would be appropriate for a Kudzu trimmer, but that's another story.

In radio work, the impedance of a circuit is kind of like saying what size screw and what thread pitch you have. If you want things to work, you make sure your nuts and bolts are the same size. The impedance of the source of energy really likes to be about the same as the impedance of the load (or the thing that "consumes" the energy). Impedance is kind of like electrical screw size. Your transmitter has a 50 ohm output impedance, which you can run on 50 ohm coax, to your 50 ohm antenna. If everything is 50 ohms, it all just works. If you use 120 ohm coax, it is like putting a 40 volt light bulb on a 12 V battery. You get some light, but it is not very efficient.

When radio frequency energy is mismatched, a funny thing happens. Some of the energy is reflected back down the transmission line (coax). Imagine taking the fire hose that the fire department is using in its attempt to terminate your house's impedance mismatch (they call that the fire), and aiming it at a one half inch hole in a wall with a hose attached to the other end. You would not have 100 percent of the water that hits that hole go through the wall and out of the hose.

You would have a lot of water splattering back (geeks say "reflecting") in your face (geeks say "reflecting back to the source"). If you had a five foot hole that you were shooting the water into (like where your bay window use to be), it would still be a bad mismatch. While all the water would go in, it is a fraction of the water a five foot hole can carry and thus is very inefficient.

When you have a pool of water and you impart some energy into it (by doing a cannonball), you cause a wave to be launched. When the wave hits the sides of the pool, very little energy is lost (since the pool side is a bad mismatch for the impedance of the energy in a cannonball). The bulk of the energy reflects back into the pool. The waves are reflected back.

So, when you have an electrical mismatch of impedance, you get some of the energy reflected back. If you were to envision what this looks like, it might be like having one end of a rope on a door knob, and you (the transmitter) would be shaking the rope at some frequency. Your body and a door are a very mismatched impedance. If you walk into a door, your energy is not optimally absorbed. It is rudely reflected. Even geeks call this pain. So there you are waving your arms and the rope back and forth, trying to transmit energy to the door. It is such a bad mismatch, that you get a refection of the wave on the rope. If you move your arm at a constant rate, you can get a pattern in the rope of one or more points where the rope is not moving, and one or more points where the rope is alternating back and forth between very high and very low.

This is called a standing wave. The worse the mismatch of impedance, the higher the crest of the wave. If you were to look at a coax that had a perfect match, there would be a constant height wave. The energy flow would be smooth and efficient. As you get a mismatch, you start to get standing waves. The ratio of the voltage peak of the standing wave to the voltage minimum is called.....

The Standing Wave Ratio.

The higher it gets, the worse the mismatch becomes. If there are no peaks or valleys, the ratio is one to one.

If an antenna is the correct length, it is a perfect match for the 50 ohm transmitter and transmission line at a given frequency. If it is too long or too short, it starts to reflect power due to the mismatch and you get standing waves. Some of your energy gets sent back to the transmitter. So what is the loss (in DB, of course!) that you get with the standing wave ratios? Here's a little table I carry in my wallet (really! I do!):

| | | **** At 10 Watts **** | |
|---|---|---|---|
| SWR | Db Loss | Power to Load | Reflected Power |
| 1.5 :1 | 0.18 | 9.9 | 0.1 |
| 2.0 :1 | 0.51 | 8.88 | 1.12 |
| 3.0 :1 | 1.25 | 7.5 | 2.5 |
| 4.0 :1 | 1.94 | 6.4 | 3.6 |
| 5.0 :1 | 2.55 | 5.66 | 4.44 |

As you can see, even at an SWR of 3.0 to one, there is only 1.25 Db of loss. And as we all know, you can barely hear that. At 5.0 to one, there is a small, barely perceivable loss in signal (2.55 Db of loss). So why is everyone nuts and worrying about whether their SWR is 1.3 to one or 1.2 to one? Beats me. At 1.25 to one, there is 0.05 Db of loss. That's 0.1 watts. So from a Db point of view, anything below 4.0 to one is just fine.

Now I need to give Ohms law equal time. Remember that if we have a 100 watt transmitter on a 50 ohm line, the voltage is 70 volts. The peak voltage is 100 volts. Now take that and give it a four to one ratio. Now you have a peak of say 200 to 50 volts. What we are starting to see here is that SWR causes problems because the voltages on the coax (and thus at the antenna and at the transmitter output) can get very big. A 30 to one SWR (This is called no antenna at all) could produce 1000 volts at 100 watt power levels. This is enough to pop a lot of components in your system. It can also break your transmitter (and you thought I was talking about your transmitter).

So what are some good rules of thumb here? Here are some:

1) Any SWR of 2.0 to 1 and under is just fine from a loss point of view.

2) When the SWR gets over 2.0 to one, the voltage on the line is the problem. At a one or five watt level, this may not be a problem. At high power levels, it is.

3) Keep in mind that when working on antennas at anything over a few watts, it is possible to have

some nasty voltages there. Incidentally, shocks from RF are much worse than normal line voltage, 60 Hz shocks. In fact, they are not called shocks. They are called RF *burns*. There is a reason for this. Please don't attempt to experience it for yourself.

4) Your house makes a lousy terminator for a 12 volt bulb plugged into a 120 V line.

*Pete Hallenbeck WA1YYN*

# 145.13 NOW ON LIBRARY!

The 145.13 (-) W4ATC NC State University Radio Club Repeater is now atop the DH Hill Library on Campus. The system went up Thursday afternoon with the help of Faculty Advisor; Fred AD4GX, Club President; Adam N4ZSM, Club Member; Bill KD4ISF, and Alumni Tech Advisor; Danny KD4RAA.

The repeater uses an RC-1000 controller and a Harris radio running about 20 watts through a pair of Wacom Duplexers into a Diamond 500 Dual-band antenna at about 160 feet on top of the Library.

The radio and controller has been on the Musten Communications bench for the last several weeks getting a work over. With help from Dan KD4VGM and Adam N4ZSM, we have managed to improve the audio response, fix the desense on the receiver, and fine tune the cavities.

Many thanks also to Forest Hills Baptist Church for the use of the steeple to use as a temporary site to test out the machine.

The 145.13 StARS machine is a co-operative effort of the NCSU Radio Club and the Raleigh Amateur Radio Society.

*Danny Musten KD4RAA*

# DISABLED HAMS FUND

The ARRL Foundation has established The Program for the Disabled Fund. This, to raise funds for the development of educational and informational materials for disabled licensed or prospective hams. Your contribution can help make popular ARRL publications available in forms most useful to disabled hams and their instructors. For more information please contact The ARRL Program for the Disabled Fund, 225 Main Street, Newington, Connecticut 06111.

*from Amateur Radio Newsline*

# UHF/VHF SIG Meeting October 12

The RARS UHF-VHF SIG held its October meeting at the residence of John KE4IZX on October 12. In attendance were KJ4SO, WA4MJF, WA4PEN, AB4OZ,KO4QH, KB4RZ, KD4IHW, W4/DJ8UI, N4YTO, KE4FCJ and WA4YYN.

Woody KJ4SO announced that Chuck hopes to have the new repeater for 146.64 in place by the end of the month. Repairs to the 220 Repeater have been finished, and hopefully it will be on the air at Bayleaf by Thanksgiving. The STARS repeater has been moved to the top of D.H. Hill Library at NC State.

Ed WA4PEN brought the SIG a "home brew" thank you card for the plants he received from the SIG while he was "relaxing" following his recent stay at the hospital.

Pete, WA4YYN, showed the SIG a panoramic picture taken from the site of the 443.475 repeater. As soon as WUNC TV's new tower is built, this repeater will be moving to a platform at the 1000 ft level. Pete mentioned the possibility of several groups working together to put 220 and 1.2 Gig repeaters on the tower.

Plans were made to have the SIG Christmas Dinner at the Panda Inn on Saturday, December 11. Woody will see if he can make reservations, and plans will be finalized at the November SIG Meeting.

After discussion on upcoming plans for Packet and the Packet Cluster, the meeting adjourned to the Kitchen for refreshments. The November meeting will be held on Wednesday, November 8 at the residence of Ronny, WA4MJF and Sherri KB4EXL.

*David N4YTO & Pat KE4FCJ*

# DEAD HAMS GET MOST NEWS COVERAGE

If you're looking for Amateur Radio news in the general press, check the obits — that's the most likely place to find news of our hobby!

Journalism Professor Steve Padgett KK4NM, reported on a computer search of 50 daily newspapers for the ARRL's October "Field Forum" newsletter. The search included only the month of June — Field Day month.

The result: of the 84 stories that mentioned Amateur Radio, 25% were obituaries, the most frequent category. 12% of the stories were about Field Day, and 11% were general feature stories.

Other categories, all below 5%, were public service, VE exams, government actions, TVI problems, antenna zoning problems, emergency communications, and general club announcements.

*Gary KN4AQ*
*ARRL NC Public Information Coordinator*

# IT'S GROUNDED HOW?

This story was related by Pat Routledge of Winnipeg, Manitoba, Canada about an unusual telephone service call he handled while living in England.

It is common practice in England to signal a telephone subscriber by signaling with 90 volts across one side of the two wire circuit and ground (earth in England). When the subscriber answers the phone, it switches to the two wire circuit for the conversation. This method allows two parties on the same line to be signalled without disturbing each other.

This particular subscriber, an elderly lady with several pets called to say that her telephone failed to ring when her friends called and that on the few occasions when it did manage to ring her dog always barked first. Torn between curiosity to see this psychic dog and a realization that standard service techniques might not suffice in this case, Pat proceeded to the scene. Climbing a nearby telephone pole and hooking in his test set, he dialed the subscriber's house. The phone didn't ring. He tried again. The dog barked loudly, followed by a ringing telephone. Climbing down from the pole, Pat found:

a. Dog was tied to the telephone system's ground post via an iron chain and collar

b. Dog was receiving 90 volts of signalling current

c. After several jolts, the dog was urinating on ground and barking

d. Wet ground now conducted and phone rang.

Which goes to prove that some grounding problems can be passed on.

*Roger Chen*
*via Internet and Brian Hamill KD4BFJ*

# NEW QRP ASSOCIATION

Several low power (QRP) enthusiasts in the triangle area have expressed an interest in forming a regional QRP Association.

Possible topics relating to such a group include:

-Weekly net(s) on 80 meters
-Contests / Awards / Special QSL cards to reflect the organization
-Special Events
-Homebrew club projects
-Periodic newsletter
-Regular meetings
-How regional in focus? (Triangle Area QRP Assoc.,NC QRP Club)

Your input would be valuable in helping to set goals. All are welcome. Please feel free to call me at home, or leave me a note on the RARS BBS, to discuss any ideas. We'll be happy to put any interested folks on our mailing list.

*73, Paul Stroud AA4XX*
*779-1637*

# KUDOS & CONGRATS

The presentation that Laura Sobon AD4PU gave at the Youth Forum of the Dayton Hamvention has received much acclaim in the ham radio press, including prominent mentions in articles in the September issue of *73 Magazine* and the July issue of *Worldradio* magazine.

According to *Worldradio*,

"Youth forum attendees were in for a treat with Laura Sobon AB4PU, from Raleigh, North Carolina. Although Laura is only ten years old, she has already earned her Extra Class license! Laura shared some of her Amateur Radio experiences and explained how her father got her interested in the hobby."

Curt Phillips KD4YU has been named Contributing Editor of *ENERGY USER NEWS* magazine, that nation's oldest magazine dedicated to energy management.

*Send information for inclusion in Kudos & Congrats to the Editor at the address listed on page 2.*


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# JARSfest NOVEMBER 20th

On Sunday, November 20th the last major hamfest of the season in this area will be held in Benson. The Johnston Amateur Radio Society (JARS) will be sponsoring the hamfest at the American Legion building on Highway 301. Dealers will be inside the building and the flea-market space outside the building has been expanded for this year's JARSfest.

For those heading south on I-40, taking Exit #325 to the right will lead you to Highway 301. Turn right on Highway 301 and the American Legion building is just a short distance on the right. Talk-in will be available on the 147.27 MHz repeater.

Admission is $5 at the door and $4 in advance. For advance tickets contact Jim Creswell KJ4SW (919-894-5479 evenings) prior to November 7th.

Ham examinations will be held in conjunction with the JARSfest. Contact Vince Yakamavich AA4MY at 847-8512 for information on the examinations.

So scrape together your spare shekels and any gear you couldn't sell at the auction (or perhaps some equipment you purchased at the auction) and head down to Benson on November 20.

After all, Christmas is just around the corner and the perfect gift for your special someone is sure to be found at the JARfest.

*Curt KD4YU*

# Not Too Late for SURVEY DRAWING

You have until the November meeting to turn in your survey in time to be entered in the drawing for a 1995 ARRL Handbook. Although your surveys are welcome at any time, you must have it in the hands of Mike Murphy by November 1st to be entered in the drawing. For copies of the survey, contact Mike Murphy at 847-4641.

*Curt KD4YU*

*continued from page 1*

for it then; perhaps something like AIDS is now. A disease that required the sufferer to cut themselves off from the rest of society, lest they infect someone else.

And then the ten were healed. Totally cured of leprosy; now they had their health and could rejoin their family and friends. Yet only one of the ten gave thanks for their healing. Giving thanks is such a simple thing to do, being cured of leprosy was such a miraculous and wonderful thing to have experienced, yet only ONE of them bothered to thank the One who healed them. I always wondered how the other nine could be so ungrateful?

Sure, Stalin said that gratitude was the weakness of dogs, but look what happened to the country he helped found. While the good ole USA has made it, warts and fights and all, for over two centuries, Stalin's "workers paradise" only hung in there for about three-quarters of a century. Perhaps thanks and gratitude shouldn't be so easily scorned.

Who has helped you in amateur radio? Have you thanked your "Elmer" recently for helping you get your license? Have you thanked those who put on the classes? Have you thanked those who coordinate the club activities, who keep the repeater going, who arrange for the special events (like the picnic) and who work in the emergency and public service events from whence we get the justification for our existence? Have you thanked those all important people who bring the donuts and soft drinks to the meetings?!

Have you thanked those who helped RARS get a new meeting place? Remember, just over a year ago we were about to be a club without a home, but some of our club members worked diligently and finally found us a great new place to meet. Certainly we should give thanks for that.

RARS is a great club because of the many people who give their time and talent to make it great. See if you can seek out just a few of these people and let them know you appreciate their efforts.

Not one of us got where we are, wherever that is, vocationally, avocationally or personally without some help. In this season of thanksgiving, take the time to say thanks to those who have helped you. Giving thanks helps all of us remember that we are not in it alone, lest we get conceited.

As for me, I'd like to thank my "Elmer", Chuck K4HF and all those who have contributed to *The Exciter* over the past year. Special thanks go to Jeff AC4ZO for his dependable submissions of the minutes of the meetings, Gary KN4AQ for contributing many articles over the year, Chuck K4HF for handling the calendar and Mike WA4BPJ for his help with the mailing labels. And thanks to all of *The Exciter* advertisers for their support.

Who should you thank?

*Curt KD4YU*

# RARS REPEATER INTERFERENCE UPDATE

The radio station that has been causing interference to the Raleigh Amateur Radio Society 146.64 MHz repeater has been identified and notified of the problem with its transmitter.

Unfortunately, the owner of the transmitter did not seem interested in working to resolve the problem. Further investigation revealed that the transmitter's license expired over 3 years ago. The transmitter owner remained uncooperative, and the result is that a letter detailing the spurious signal and the licensing situation has been mailed to both the tranmsmitter owner and the District Office of the Federal Communications Commission.

More on this when we hear from the FCC.

*Curt KD4YU*

**The HOMEBREW SIG**
**will not meet in November or December.**

## PUBLIC SERVICE EVENTS NEED YOU!

Public Service is one of the prime justifications for the existence of amateur radio. Contact RARS Public Service Director Doug Sweet AD4UL at 481-1102 to let him know you're available to help.

# TELEPHONES SUSCEPTIBLE TO RADIO INTERFERENCE

The FCC says it now receives 25,000 telephone interference complaints per year and ham radio is one of the primary culprits. According to a news release from the Field Operations Bureau this is the results found as a result of testing 241 residential telephones, selected from field office complaint files.

The study showed that 68% of the transmitting stations most likely involved in the interference complaints were citizens band, broadcast, and amateurs. Citizens band stations accounted for half the interference and broadcast and amateur stations accounted for the other half.

During the study, FCC investigators tested two telephone models claimed by their manufactures to be interference proof. In virtually all cases, replacement of the telephones receiving interference with the one of these two interference free models solved the problem. The addition of external filters provided satisfactory results in only one third of the cases.

*from Amateur Radio Newsline*

# SMRS FRAUD CHARGE

The Securities and Exchange Commission, responding to a complaint about a Florida based licensing mill has teamed up with the FCC's Miami office to act in the case. As a result, an investment company brokering the sale of Specialized Mobile Radio System and Private Carrier licenses as investments through infomercial television advertising is now charged with interstate fraud.

The FCC Miami Office provided information about licensing procedures and developed facts that showed the investment firm had been charging an average of $7,000 for each license. The SEC has seized the company and issued a temporary restraining order against its owners doing further business. Before it was able to stop the scheme some 12,000 investors had been dinged.

*from Amateur Radio Newsline*

# TO BE A HELPING HAM

Why are we here? To explore strange new worlds? To seek out... OOPS, wrong show. Seriously, why are we hams? Why has the FCC seen fit to allow us to use the precious amount of spectrum we use? Trust me, we don't have use of the airwaves because someone decided to be nice, and while maybe we could claim squatters rights, lets face it amateur radio operators have earned the right to talk to each other via radio. Unfortunately with the advent of the communications age, there is suddenly more and more competition for our precious spectrum.

Lets not assume the amateur radio will be allowed to keep its portion of the spectrum because of past good deeds. And while we can be hopeful, lets not count on common sense prevailing in Washington or in Gettysburg. It is important that each of us remember that public service and emergency communications are the primary reason we exist. Very few of us, the author included can say that we have done our part, paid our dues so to speak.

Take time to reflect over the past year. How much time did you spend on the air? How many club meetings did you make it to? Were the doughnuts good? And wasn't the RARS Fest social wonderful? Okay, let me ask a few more questions. Have you volunteered to help Doug, AD4UL with a public service event? Did you volunteer to assist Tom, KM4LB, with Wake County ARES? Did you participate in the Simulated Emergency Test? Have you helped at a club meeting or social? Did you help with the RARS-Fest? Nope, buying a ticket doesn't count. How about the Exciter? Have you helped by sending in an article?

Well, my score is not as good as it should be either. My goal is to do better over the next year. However, this is a team effort. Everyone has to help or we'll be wondering, "What ever happened to RARS," or worse yet, "remember when we had Amateur Radio?"

*David N4YTO*

**BIG RARS AUCTION**

**at the meeting on NOVEMBER 1st.**

*(see front page for details)*

# North Carolina Packet Systems List

## *Sorted by Frequency*

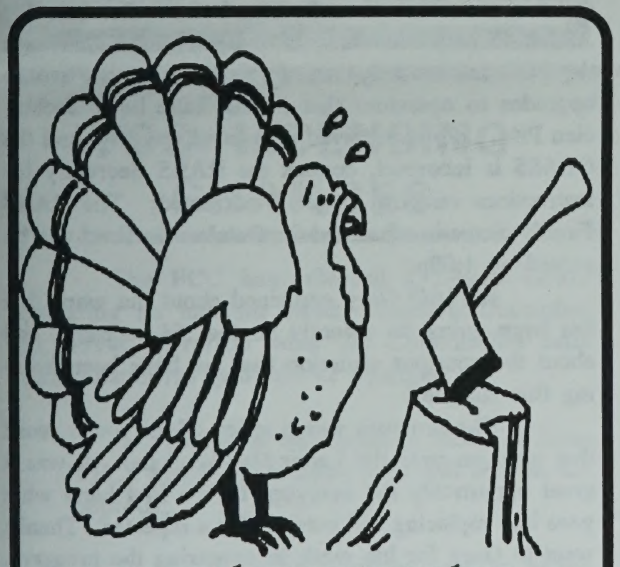
Types of Systems:
PCF = Packet Cluster Forwarding Node
PCl = Packet Cluster
NNode = Network Node
LNode = LAN Node

| Freq | City | Call | Alias | Type of System | Data Speed |
|---|---|---|---|---|---|
| 144.91 | Clayton | pending | | PCF | 1200 |
| 144.93 | Apex | pending | | PCF | 1200 |
| 144.93 | Hickory | KD4OM-2 | HKYDX | PCl | 1200 |
| 144.93 | Salisbury | WA4PVI | DXSAL | PCl | 1200 |
| 144.93 | Stanley | N4ZC | STNC | PCl | 1200 |
| 144.95 | Ashville | N4AA-5 | AVLDX | PCl | 1200 |
| 144.95 | Elizabethtown | K4JEX-1 | ETOWN | PCl | 1200 |
| 144.95 | Morehead City | K4DHZ | | PCl | 1200 |
| 144.95 | New Bern | K4DHZ-2 | DXEWN | PCl | 1200 |
| 144.95 | Wake Forest | pending | | PCF | 1200 |
| 144.95 | Wilmington | N4MYB-1 | DXW | PCl | 1200 |
| 144.97 | Rocky Mount | KO4PE | | PCl | 1200 |
| 144.97 | Rocky Mount | WF2G-2 | DXRWI | PCF | 1200 |
| 144.97 | Rocky Mount | WF2G-6 | DXH2O | PCF | 1200 |
| 144.97 | Rougemont | pending | | PCF | 1200 |
| 144.97 | Sharpsburg | KO4PE | none | PCl | 1200 |
| 144.97 | Windsor | WA4VTX-5 | ECDX5 | PCF | 1200 |
| 144.99 | Orange County | pending | | PCF | 1200 |
| 145.01 | Asheboro | KJ4AV-1 | ASHB | Node | 1200 |
| 145.01 | Asheville | W4MOE-1 | NCAVL | Node | 1200 |
| 145.01 | Carthage | N4UGM-1 | | Node | 1200 |
| 145.01 | Charlotte | W4BFB-1 | NCCLT | Node | 1200 |
| 145.01 | Clinton | KB4NOZ-5 | NCCTZ | Node | 1200 |
| 145.01 | Elizabeth City | N4QLD | | BBS | 1200 |
| 145.01 | Elizabeth City | WA4VTX-1 | ECITY | Node | 1200 |
| 145.01 | Fayetteville | WA4FLR-8 | FAY | Node | 1200 |
| 145.01 | Goldsboro | WD4JPQ-2 | GSB | Node | 1200 |
| 145.01 | Greensboro | WB4WOR-4 | GSOBBS | BBS | 1200 |
| 145.01 | Greensboro | WB4WOR-5 | NCGSO | Node | 1200 |
| 145.01 | Hickory | KD4OM-1 | NCHKY | Node | 1200 |
| 145.01 | Lumberton | KF4WQ-2 | LBTBBS | BBS | 1200 |
| 145.01 | Lumberton | KF4WQ-3 | NCLBT | Node | 1200 |
| 145.01 | Nags Head | WB8PAG-2 | DARE | Node | 1200 |
| 145.01 | New Bern | WA3JPY-1 | EWN | Node | 1200 |
| 145.01 | New Bern/Grnvl | WA3JPY-7 | EWNBBS | BBS | 1200 |
| 145.01 | Plymouth | KB4ZAZ-1 | PLY | Node | 1200 |
| 145.01 | Raleigh | KM4OX | RNC | Node | 1200 |
| 145.01 | Raleigh | N1GMV | GMVBBS | BBS | 1200 |
| 145.01 | Roanoke Rapids | N4WFU-0 | WFUBBS | BBS | 1200 |
| 145.01 | Roanoke Rapids | N4WFU-1 | RRNC | NNode | 1200 |
| 145.01 | Rocky Mount | WF2G-1 | RWI | NNode | 1200 |
| 145.01 | Wilkesboro | KC4KRR-2 | NCWILK | Node | 1200 |
| 145.01 | Winnabow | KB4NOZ-1 | NCILM | Node | 1200 |
| 145.03 | Charlotte | N7IJI-3 | | NOS | 1200 |
| 145.03 | Flat Top Mt. | KD4WYX-3 | | NOS | 1200 |
| 145.03 | Greensboro | WB4WOR-3 | | NOS | 1200 |
| 145.03 | High Peak | K4OLC-2 | | NOS | 1200 |
| 145.03 | Shelby | W4NYR | | NOS | 1200 |
| 145.03 | Taylorsville | WB4FQB-2 | | NOS | 1200 |
| 145.03 | Winston-Salem | W4NC-3 | | NOS | 1200 |
| 145.05 | Charlotte | N7IJI | BBSCLT | BBS | 1200 |
| 145.05 | Charlotte | W4BFB | CLTBBS | BBS | 1200 |
| 145.05 | Charlotte | W4BFB-2 | CLT | Node | 1200 |
| 145.05 | Lumberton | KF4WQ-4 | LBTLAN | Node | 1200 |
| 145.05 | Wilkesboro | KC4KRR-3 | WILKES | Node | 1200 |
| 145.07 | Gastonia | WB4KDF-4 | GASBBS | BBS | 1200 |
| 145.07 | Gastonia | WB4KDF-7 | GASTON | Node | 1200 |
| 145.07 | Kings Mountain | WB4FUT-7 | KMT07 | Node | 1200 |
| 145.07 | Reidsville | K4YEC-3 | RVNC07 | Node | 1200 |
| 145.07 | Salisbury | W4HG-7 | SAL07 | Node | 1200 |
| 145.07 | Winston-Salem | N4UFF-07 | INTBBS | BBS | 1200 |
| 145.07 | Winston-Salem | N4UFF-7 | INT07 | Node | 1200 |
| 145.09 | Burlington | AC4DZ-9 | BUY09 | Node | 1200 |
| 145.09 | Clayton | KD4RAA-1 | DXCLAY | PCF | 1200 |
| 145.09 | Durham | WA4WTX-1 | DNC | PCF | 1200 |
| 145.09 | King | K4JYH-9 | STK09 | Node | 1200 |
| 145.09 | King | WB4UFM | STKBBS | BBS | 1200 |
| 145.09 | Raleigh | W4DW | | PCl | 1200 |
| 145.59 | Boone | KA1TB | none | BBS | 1200 |
| 145.61 | Blowing Rock | KD4VKC-1 | BRCK | Node | 1200 |
| 145.61 | Hickory | KD4OM | HKYBBS | BBS | 1200 |
| 145.61 | Hickory | WA4MDW-1 | HKY | Node | 1200 |
| 145.63 | Asheville | N9BE | AVLBBS | BBS | 1200 |
| 145.63 | Asheville | W4MOE-2 | AVL63 | Node | 1200 |
| 145.63 | Hendersonville | W4MOE-4 | HVL63 | Node | 1200 |
| 145.63 | New Bern | WA3JPY-2 | EWNLAN | Node | 1200 |
| 145.63 | New Bern/Grnvl | WA3JPY-7 | EWNBBS | BBS | 1200 |
| 145.63 | Saphire | W4EHV-3 | SFRE63 | Node | 1200 |
| 145.65 | Greensboro | KD4ANI-5 | GSO | Node | 1200 |
| 145.65 | Greensboro | WB4WOR-4 | GSOBBS | BBS | 1200 |
| 145.65 | Morehead City | WA3JPY-3 | MRHLAN | Node | 1200 |
| 145.67 | Apex | NO0T-3 | DXAPEX | PCF | 1200 |
| 145.67 | Concord | K4CEB-1 | CON | Node | 1200 |
| 145.69 | Locust | KC4FWC-1 | LOCUST | Node | 1200 |
| 145.69 | Wadesboro | KD4LV | ANSBBS | BBS | 1200 |
| 145.69 | Wilmington | KD4JRX-4 | WXBBS | BBS | 1200 |
| 145.69 | Wilmington | WD4JBL-2 | ACABBS | BBS | 1200 |
| 145.69 | Winnabow | KB4NOZ-3 | ILMLAN | Node | 1200 |
| 145.69 | Wrightsvl Beach | KD4PSX-2 | ILMBBS | BBS | 1200 |
| 145.71 | Elizabeth City | WA4VTX-2 | ECLAN | PCl | 1200 |
| 145.71 | Winston-Salem | KC4HCY-1 | INT71 | Node | 1200 |
| 145.71 | Winston-Salem | N4UFF | INTBBS | BBS | 1200 |
| 145.71 | Yadkinville | N4VRD-9 | YAD71 | Node | 1200 |
| 145.73 | Durham | KB4WGA-1 | DURBBS | BBS | 1200 |
| 145.73 | Durham | KB4WGA-2 | DUR73 | Node | 1200 |
| 145.75 | Raleigh | pending | | PCF | 1200 |
| 145.90 | Elizabeth City | WA4VTX-4 | ECDX4 | PCl | 1200 |
| 147.48 | Lumberton | KF4WQ-6 | LBTHS | Node | 9600 |
| 147.48 | Morehead City | WA3JPY-4 | MRHHS | Node | 9600 |
| 147.48 | Winnabow | KB4NOZ-4 | ILMHS | Node | 9600 |

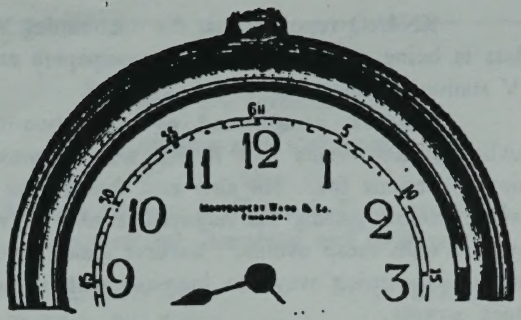
| | | | | |
|---|---|---|---|---|
| 147.48 Writsvl Beach | KD4PSX-4 | ILMBBS | BBS | 9600 |
| 147.51 New Bern | WA3JPY-5 | EWNHS | Node | 9600 |
| 147.51 New Bern/Grnvl | WA3JPY-7 | EWNBBS | BBS | 1200 |
| 147.54 Cary | N4AJF-2 | CNCLAN | Node | 1200 |
| 147.54 Raleigh | N1GMV-54 | GMVBBS | BBS | 1200 |
| 147.54 Roanoke Rapids | N4WFU-0 | WFUBBS | BBS | 1200 |
| 147.54 Roanoke Rapids | N4WFU-2 | RRLAN | LNode | 1200 |
| 147.57 Apex | NO0T-2 | SWAN | PCF | 1200 |
| 147.57 Raleigh | W4DW | | PCI | 1200 |
| 430.55 Morehead City | WA3JPY-4 | MRHHS | Node | 9600 |
| 430.55 New Bern | WA3JPY-5 | EWNHS | Node | 9600 |
| 430.55 New Bern/Grnvl | WA3JPY-7 | EWNBBS | BBS | 1200 |
| 430.55 Roanoke Rapids | N4WFU-0 | WFUBBS | BBS | 9600 |
| 430.55 Roanoke Rapids | N4WFU-3 | RZZ | NNode | 9600 |
| 441.05 Cary | N4AJF-4 | CNCL96 | Node | 9600 |
| 444.15 Sharpsburg | KO4PE | none | PCI | 1200 |
| 445.15 Apex | NO0T-1 | DXRNC | PCF | 1200 |
| 445.15 Clayton | KD4RAA-2 | CLAY | PCF | 1200 |
| 445.15 New Bern | K4DHZ-2D | XEWN | PCF | 1200 |
| 445.15 Raleigh | NO0T-5 | DXRAL | PCF | 1200 |
| 445.15 Wilson | NE4J-1 | DXWLS | PCF | 1200 |

System operators only: please send updates/corrections Gary Pearce KN4AQ@N1GMV.#RTP.NC.

*Gary KN4AQ*



HAPPY THANKSGIVING
FROM
THE RALEIGH AMATEUR RADIO SOCIETY
AND *THE EXCITER*



# MINUTES OF THE MEETING

## Board Meeting

### September 1994

The monthly Board meeting of the Raleigh Amateur Radio Society was held at the Forest Hills Baptist Church on September 20. The meeting was called to order by KA3PSK at 7:16p. Members present at that time: KD4ACW, KN4AQ, WA4BPJ, K4HF, KD4LLQ, WA4PEN, KA3PSK, AD4UL, KD4YU, AC4ZO.

Motion by AD4UL to approve the June minutes as written. Seconded by WA4BPJ. None opposed.

WA4BPJ gave the treasurer's report.

In his VP report, KD4LLQ announced that the Icom representative that was scheduled for the October meeting will not be able to attend. Bill also announced that the time for the picnic has been changed. The food will be served at 4:00p instead of 2:30p as previously reported. KA3PSK announced that JARS has donated 17 tickets for the JarsFest. 15 are for the VEs that will be giving tests there and the other 2 are to be given as door prizes at the October meeting. The JarsFest is scheduled for November 20 in Benson, NC.

WA4MJF reported that Tom KM4LB is planning a simulated emergency test on October 15, and that phone, CW, and packet operators are needed from 0800 to 1200 local time. Also, Ares nets are conducted on Wednesday nights at 9:30p on the .88 repeater.

KD4ACW reported that RarsFest is scheduled for April 9, 1995.

KN4AQ reported that the upcomming RARS class is being publicized in area newspapers and on TV stations in the area.

AD4UL announced several upcomming public service events that RARS will be providing communications for. He also said that he has been having trouble getting the required number of volunteers to man these events. Several ideas were discussed concerning ways to increase participation in these events.

WA4MJF who is working on our "tax-exempt status" situation reported that he is working with an Assistant Attorney General and will provide more information at the October Board meeting.

There was a lively discussion initiated by KD4YU concerning multiple-year memberships, and staggering membership experation dates. No action was taken by the Board.

K4HF announced that a nominating committee is needed. Two of the Officers and all Board members except Hamfest Chairman and Field Day Chairman are up for election this year.

Upon motion by AD4UL, seconded by KD4ACW, the meeting adjourned at 8:56p.

*Respectfully submitted,*
*Jeff Wittich, AC4ZO - Secretary*

# Regular Meeting

## October 1994

The regular meeting of the Raleigh Amateur Radio Society was held on October 4, 1994 at the Forest Hills Baptist Church on Clark Avenue. The meeting was called to order at 7:33p by Rick KA3PSK who welcomed 88 members and 3 guests.

Mike WA4BPJ gave the Treasurer's report.

The following announcements were made:

KA3PSK - The Sanford hamfest has been cancelled.

NA4G - Commercial FCC examinations will be given in Durham on October 22. Details are available from Steve AB4EL; The Homebrew SIG will meet in parallel with the Crystals meeting in October and January. Meeting time is 6:30p on the 4th Tuesday of the month. There will be no Homebrew SIG meeting in November and December.

KC4UPX - Help is still needed at the North Carolina State Fair. Anyone that can donate time to provide communications for the Red Cross can contact Bernard to sign up.

NO0T - Jamboree On The Air is a special event involving scouts from all over the world. It is scheduled for October 15, and anyone that would like to operate during the event was asked to contact Paul NO0T.

KA3PSK - A Simulated Emergency Test (SET) is planned for October 15. The exercise begins at 8:00a and will last until about 12:00p. Operators are needed for HF and Packet. Persons able to participate were asked to contact Tom KM4LB for details.

KD4WTJ - The Student Amateur Radio Society at NCSU has scheduled a fox-hunt for Saturday, October 8. Participants were asked to contact Phil KD4WTJ for starting times and location.

KA3PSK - Ken N4ZBB has taken over coordinating the group purchase of Poly Phasor lightning arrestor. Anyone that wants to be included in the order was asked to call Ken before October 11; ARRL Headquarters has issued a bulletin that says the FCC has recently issued some Technician license upgrades to operators that should have been Technician Plus. If you received a renewal recently, and the CLASS is incorrect, contact the RARS Secretary for instructions on how to get it corrected; The RARS Family picnic is scheduled for October 8. Food will be served at 4:00p.

KN4AQ Gary explained about the work that has been going on recently on the .64 repeater, and about the spurious emission that we have been hearing this summer.

The program was a video of the tower work that went on over the Labor Day weekend. It was a great opportunity for everyone to see first hand what goes into replacing and antenna for a repeater. Thanks went to Gary for his work in preparing the program.

Reed, AB4W, the NC Section Manager for the ARRL addressed the membership and explained more about the SET planned for the 15th.

The meeting adjourned at 9:07 with door prizes being awarded to: KE4EMY, KE4CTW, KD4ACK, KE4RHU, N4PNO, and W5PGX.

*Jeff Wittich AC4ZO, Secretary*

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10/94

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**1314 Chaney Rd** **(919) 851-5169**
**Raleigh, NC 27606**

5/95

**KN4FL**

**JOHN P. SWAIN, JR., D.D.S.**

**225 Bryan Building**
**Cameron Village**
**(919) 833-3826** **Raleigh, NC 27605**

KC4KIC
Sam Johnson
Attorney

P.O. Box 1776
Raleigh, NC 27702 USA

Bus. (919) 832-8396
Res. (919) 787-0603

*Johnson, Mercer, Hearn & Vinegar, PLLC*

# FCC LICENSING CHANGES

The FCC has released a 7-page Order amending its amateur rules, effective December 20, 1994, to reflect what the Commission calls "nonsubstantive procedural changes":

1. To permit electronically filed data from VECs (paper applications also will still be accepted);

2. To authorize operation as soon as the new license data appears in the amateur service licensee data base, rather than (as now) when the license document has been delivered (details of how the new licensee can determine his call sign will be announced later);

3. To add a new rules section, "Examinee Conduct," to emphasize that an examinee must comply with the instructions given by the administering VEs;

4. To treat "Technician Plus" as a license class;

5. And to provide for a "renewal short form" which the FCC says will be mailed to licensees in advance of their expiration date beginning sometime in 1995. The FCC added that renewal applications would be accepted no more than 90 days before the expiration date.

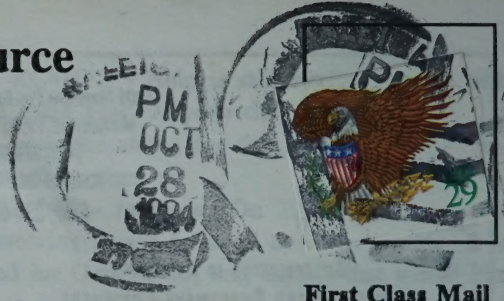
Because of the nature of these rule amendments, there is no notice or comment period required by federal law. Again, these changes do not take effect until December 20, 1994.

*from an ARRL Bulletin*

# Amateur Radio - A National Resource

Raleigh Amateur Radio Society, Inc.
P.O. Box 17124
Raleigh, NC 27619

Address correction requested.




**First Class Mail**

THE LITTLEWOOD FAMILY K4HF
2005 QUAIL RIDGE ROAD
Raleigh NC 27609
6/30/95

## Calendar of Events: November 1994

| | |
|---|---|
| **Nov. 1:** | **Regular RARS Meeting, 7:30PM, Forest Hills Baptist Church** |
| Nov. 1-7: | Hungarian QRP Contest, cw only, <5 watts, see Oct QST |
| Nov. 5-7: | ARRL Sweepstakes, cw, info see October QST |
| **Nov. 9:** | **RARS VHF/UHF SIG meeting, info, Woody KJ4SO, 848-1844** |
| Nov. 10: | Triangle Amateur TV Assoc., info, Brian KD4BFJ, 554-1279 |
| Nov. 12: | Myrtle Beach, SC Hamfest, info, Alan AB4OZ, 787-1111 |
| Nov. 19-21: | ARRL Sweepstakes, phone, info see October QST |
| Nov. 20: | JARSfest, Benson, NC w/exams (Vince AA4MY 847-8512), info see page 9 |
| **Nov. 21:** | **RARS Scanner/Shortwave Listening SIG, info, Curt KD4YU, 772-0207** |
| **Nov. 22:** | **RARS Advisory Board meeting, 7PM, Forest Hills Baptist Church, *ALL RARS MEMBERS ARE WELCOME!*** |
| **Nov. 22:** | **RARS Crystals, 6:30PM, Ryan's Steakhouse Crossroads Plaza, info, Lynn KO4QH, 787-1111** |
| **Nov. 23:** | **RARS DX SIG/Swan Isl. DX Assoc. meeting, info, Paul NO0T, 847-8830** |
| Nov. 26,27: | CQ Worldwide DX Contest, cw, see Sept QST |
| Dec. 3: | Greensboro, NC hamfest, NEW location, info, Alan, 787-1111 |